

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: JULY 27, 2020

ITEM NO: 4

SUBJECT: RFP NO. 1987 LICENSE AGREEMENT FOR SUBSTATION DESIGN SOFTWARE WITH SPATIAL BUSINESS SYSTEMS INC. FOR A THREE-YEAR TERM IN THE AMOUNT OF \$153,900

ISSUES:

Approve a License Agreement in response to RFP No. 1987 for Substation Design Software with Spatial Business Systems Inc., of Lakewood, Colorado, in the amount of \$153,900 for a three-year term; and approve future ongoing annual license renewal, subject to the availability of budgeted funds.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve a License Agreement in response to RFP No. 1987 for Substation Design Software with Spatial Business Systems Inc., of Lakewood, Colorado, in the amount of \$153,900 for three-year term;
2. Authorize the City Manager, or designee, to execute the software license agreement, with Spatial Business Systems Inc., for a three-year term, including making minor and non-substantive changes; and
3. Approve future ongoing annual license renewal, subject to the availability of budgeted funds.

BACKGROUND:

As technology advances and more extensive power system protective schemes and automation schemes are integrated and employed at electrical substations, the design is becoming more complex and time-consuming as it requires the development of hundreds of electrical drawings, schematics, and wiring diagrams.

The current state of substation engineering design and construction document creation has been a process that has made advances from pencil and paper to digital but has not included the automation of routine design functions. At the beginning of the 1990s, Substation Engineering standardized using Autodesk's AutoCAD software for substation physical design and substation

protection and control design.

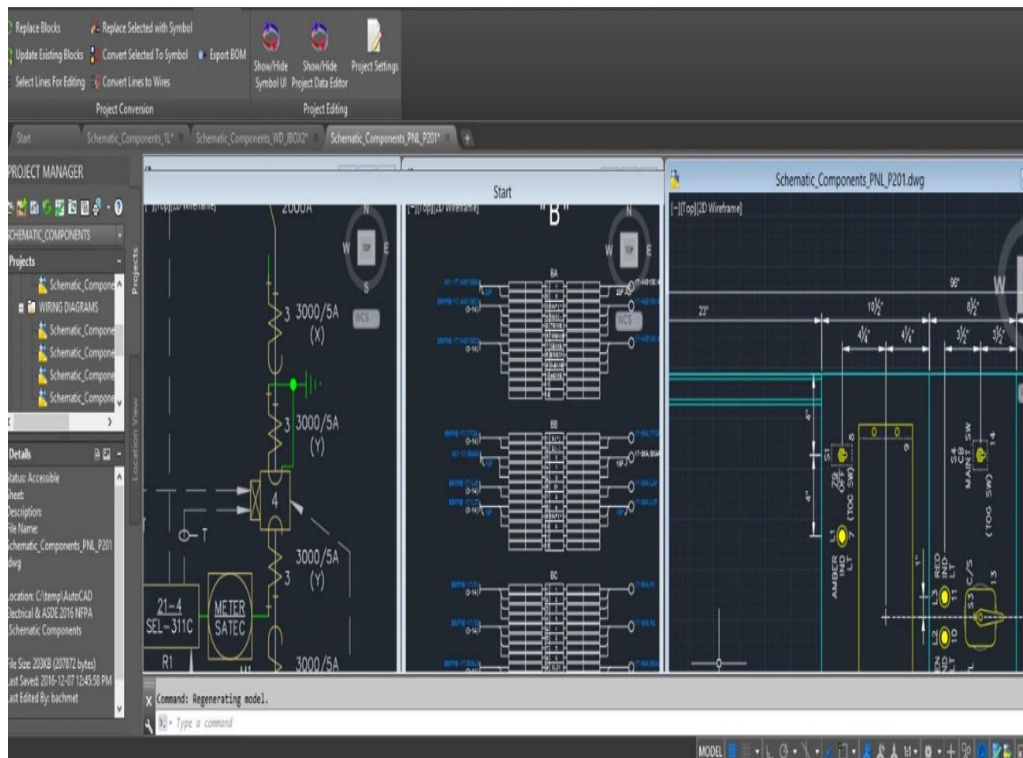
In the last ten (10) years, new substation design modeling tools have been developed. These specialized tools improve design time and accuracy for substation projects. They reduce design time by automating many of the time-consuming substation design tasks and improve the design quality through automating routine tasks and provide real-time error checking, which reduces costly errors and avoid construction delays.

DISCUSSION:

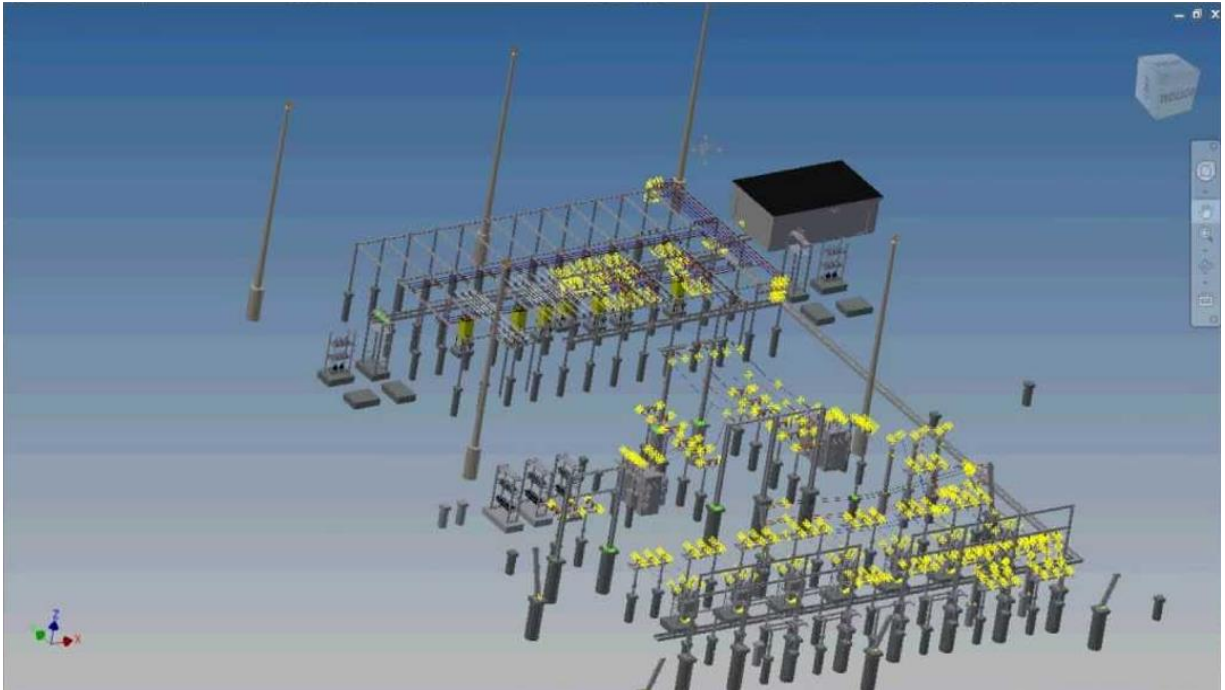
Riverside Public Utilities (RPU) solicited a request for proposals for procuring software for substation protection and control, and physical design. RFP-1987 was posted on the City's online bid system on October 16, 2019 and closed on October 31, 2019. The bid was posted publicly. Only Spatial Business Systems (SBS) submitted a proposal for their software Substation Design Suite (SDS). RPU engineering staff evaluated the proposal and determined that SBS proposal meets RPU's requirement.

SDS is a proven software that has been adopted by many utilities. SDS modules provide applications for specific substation design tasks, including physical and electrical design tools, that drastically reduce the effort required to design substations in a Computer-aided Design (CAD) environment.

SDS provides a robust set of engineering design capabilities all in one environment. Substation Design Suite consists of two software modules, SDS Physical Design, and SDS Protection and Control Design. The SDS solution is built upon the industry-leading Autodesk AutoCAD Electrical and Inventor platforms. Having a design tool built upon the Autodesk platforms significantly reduces change management risk, improves efficiency, reduces the effort required to design substations in a CAD system, reduces cost, and improves RPU's ability to hire and retain qualified talent.



Substation Design Suite - Protection and Control Design



Substation Design Suite - Physical Design

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23256.

FISCAL IMPACT:

The total fiscal impact is \$153,900. Sufficient funds are available in Public Utilities Substation Bus and Upgrade Auto Account No. 6130100-470616.

Prepared by:	George R. Hanson, Utilities Assistant General Manager/Energy Delivery
Approved by:	Todd M. Corbin, Utilities General Manager
Approved by:	Al Zelinka, FAICP, City Manager
Approved as to form:	Gary G. Geuss, City Attorney

Certifies availability of funds:	Edward Enriquez, Chief Financial Officer/City Treasurer
-------------------------------------	---

Attachments:

1. Award Recommendation
2. Software License Agreement